Hi Nancy,

We have had a chance to review the DePue Group's September 15th revised Pilot Study Sampling Report and their Response to Comments. Below are some comments and summaries of key topics from our review. We are happy to have a phone call to discuss as well, if you would like to do that.

## **General Comments**

- 1. The revisions to the Pilot Study Sampling Report and the Response to Comments appear to be only in response to the IEPA comments. It is not clear if IEPA shared any of the TASC comments with the DePue Group or if IEPA provided feedback to your CAG. Therefore, the original TASC comments submitted in June still apply to the revised Pilot Study Sampling Report.
- 2. The majority of revisions to the report are minor corrections or additions based on IEPA comments. These changes are helpful and clarify the report content, but do not have as large of an impact on the OU4 Design Study. Those comments with potentially larger impacts are described below.
- 3. Embedded within IEPA comment 24.c, IEPA states: "A dozen samples with concentrations greater than about 50 mg/kg are from the 0-1 or 1-6 inch depth interval in the east and south subareas which are closer to, and generally downwind from the slag pile and lithopone ridges. This suggests that aerial deposition of these or other waste materials may have contributed to the higher total chromium concentrations in these samples." This is the first instance where we have seen IEPA or the DePue Group acknowledge a concern for specific subareas that are considered "downwind" and therefore at a higher risk of aerial deposition. This is related to TASC's concern about the approach to evaluate the 0- to 1-inch and 1- to 6-inch soil intervals (see comment 4 of June TASC review). As stated in the June review, TASC suggests a rationale be provided for the statistical assessment given that EPA guidance specifically questions the appropriateness of this approach at smelter sites due to an increased likelihood of higher concentrations in the 0- to 1-inch interval. In the absence of such a rationale, TASC suggests that the Design Study proceed with sampling the 0- to 1-inch soil interval.

## **Specific Comments (as numerated in the Response to Comments document)**

1. Comment 6: 2.4.3 Fine Fraction Lead Soil Samples

As noted in the IEPA comment, the methodology used in sample preparation can potentially dilute the sample and misrepresent the actual contaminant concentration. The DePue Group noted that the sample preparation used was necessary due to the weather and soil conditions, and that future sampling will not occur under those conditions. TASC would support further sampling under appropriate weather conditions as part of the Design Study.

2. Comment 11: 3.1 Property Summary and Comparison of Laboratory Data with Screening Criteria

IEPA's original comment raised concerns about the overall site assessment and cleanup approach previously agreed upon with the DePue Group. While IEPA's concern would have had significant impacts on the overall approach to the site, it appears to have been a miscommunication. The DePue Group essentially noted the original text was not clear and clarified the language in the report to reiterate the agreed approach to identifying contaminants and areas in need of remediation. The DePue Group also noted that remedial decisions will be made as part of the Design Study.

3. Comment 19: 3.4.1 Enrichment Ratios and Outlier Analysis

The DePue Group notes that "statistical outlier tests such as Rosner's should not be viewed as a definitive indicator of which results should be excluded. As in this case and in the future, professional judgment will be applied to the decision of whether or not to exclude an outlier." While this is not an inaccurate statement, including a statement that "professional judgment and a description of the rationale" would be preferable to ensure such professional judgments can be independently assessed.

- 4. Comment 24: 4.2 Recommendations for OU4 Design Study
- a. Lead in the Fine Fraction

In response to IEPA concerns about dealing with lead in the fine fraction, the DePue Group states that it will work with IEPA to determine a path forward. Therefore, this process is yet to be completed, but may potentially be incorporated into the Design Study.

b. *Use of the XRF* 

The Pilot Study essentially determined the XRF to be of little use due to its inability to effectively assess the primary contaminants (i.e., arsenic, cadmium and lead). The DePue Group clarified that it will continue to assess the XRF to determine if it can be employed in the cleanup effort. The DePue Group may propose such uses in the Design Study.

c. Hexavalent Chromium

This is the only IEPA comment with which the DePue Group states it disagrees. The IEPA raises a valid concern about the remaining potential for the presence of hexavalent chromium, which is more toxic than the trivalent chromium that the DePue Group concludes is the majority of the total chromium at the site. Based on the Pilot Study results, the DePue Group does not agree that further evaluation of hexavalent chromium in OU4 soil is necessary. The distinction is essential to identifying areas of concern in OU4. TASC supports the collection of additional data to assess the presence of hexavalent chromium as a more conservative method to ensure all areas of concern to human health are identified.

Let us know if you have any questions or would like to set up a call to discuss. Thanks,

Ryan